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(54) ENDO-ORTHOPEDIC DEVICE FOR HIP JOINT RECONSTRUCTION

1

The present invention refers to Orthopedics and Traumatology.

There is a known orthopedic endo-device for reconstruction of the hip joint, which contains threaded rods with a working cutting edge and shaped rods with a hollow conical head.

However, this device is intended for long term firm immobilization of fragments of a broken tubular bone.

The purpose of the present invention is to ensure a permanent gap between articular surfaces of a joint, which has been reduced after dislocation, deteriorated due to a pathological process or created by surgery, in rotation, flexion/extension and abduction/adduction for children.

To achieve this, the present endoprosthesis device is composed of two length-adjustable sleeves, which are connected by a spherical head and an arch-shaped guide-channel with edges of a different height. Free edges of the sleeves contain dentated conical apertures for shaped rod heads, which carry threaded rods.

Figure 1 shows the present orthopedic endoprosthesis device for reconstruction of the

2

hip joint, front view; figure 2 shows the same in a lateral view.

The device contains threaded rods 1 and 2 with working cutting parts 3 and 4, shaped rods 5 and 6 with hollow conical heads 7 and 8 and is composed of length-adjusted sleeves 9 and 10. The sleeves are connected by a movable joint composed of the spherical head 11 and arch-shaped guide-channel 12 with edges of different height 13. Free ends of the sleeves have dentated conical apertures 14 for shaped rod heads, which carry threaded rods 1 and 2.

Sleeve 9 is used to attach the device to the hip bone and ensures the necessary strength at the bone-metal interface, while sleeve 10 is used to attach the device to the tubular femur. By rotating the half-shaft 15 the surgeon can set the necessary gap between articular surfaces for the growth period.

Subject of Invention

Endoprosthesis orthopedic device for reconstruction of the hip joint, containing threaded rods with hollow conical heads, which is distinguished by being composed of two length-adjusted sleeves, connected with a movable joint made of a conical hollow head

and an arch-shaped guide-channel with edges of different height, with dentated conical apertures in free ends of the sleeves for heads of shaped rods carrying the threaded rods, in order to achieve a permanent gap between articular

surfaces of joints reduced after dislocation, deteriorated due to a pathological process or created by surgery, in rotation, flexion/extension and abduction/adduction with children.

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